



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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**JAN 15 2010**

Ref: 8EPR-N

Federal Transit Administration, Region 8  
David Beckhouse  
c/o North Metro Corridor Project Team  
999 18<sup>th</sup> Street, Suite 900  
Denver, CO 80202

Re: Comments on the North Metro Corridor  
Draft Environmental Impact Statement  
CEQ # 20090395

Dear Mr. Beckhouse:

The U.S. Environmental Protection Agency (EPA) Region 8 has reviewed the Draft Environmental Impact Statement (EIS) for the North Metro Corridor Project, prepared by the Federal Transit Administration (FTA) in cooperation with the Regional Transportation District (RTD). Our comments are provided for your consideration pursuant to our responsibilities and authority under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609. It is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project, which includes a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

In accordance with our policies and procedures for reviews under NEPA and Section 309 of the Clean Air Act, EPA has rated this Draft EIS as "Environmental Concerns - Insufficient Information" (EC-2). Our environmental concerns include anticipated wetland impacts and the potential for encountering contaminated soils related to Superfund sites. Additional discussion of potential impacts and mitigation related to water quality and air quality is needed to ensure that environmental effects are properly evaluated in accordance with NEPA. A copy of EPA's rating criteria is attached.

**PROJECT DESCRIPTION**

The proposed North Metro Corridor Project would provide commuter rail transit from downtown Denver, Colorado, north to State Highway (SH) 7, with a length of approximately 18 miles. Service would be provided to Denver, Commerce City, Thornton, Northglenn, and Adams County, with station access planned at eight locations. The Draft EIS discusses two alternatives, the No Action Alternative and the Build Alternative. The Build Alternative includes four

alignment options for the congested Sand Creek Junction area (with a single alignment throughout the remainder of the corridor), as well as multiple options for most station locations. Both Diesel Multiple Unit (DMU) and Electric Multiple Unit (EMU) technologies are considered for the Build Alternative, but EMU is identified as the preferred alternative.

## **EPA CONCERNS**

An explanation of our primary concerns with the project is contained in the following paragraphs. Our primary concerns are related to wetlands, water quality, and air quality as well as project construction within Superfund sites. Additional information pertaining to these and other potential concerns for the North Metro Corridor is provided in the enclosed Detailed Comments.

### Wetland Impacts

EPA is concerned with the extent of wetland impacts from the proposed North Metro Corridor project. The acres of wetlands within the Project Study Area are broken down by wetland complex, however, the direct impacts are provided in alignment totals. Please make clear what the extent of direct, permanent impacts will be at each wetland location. Further comments regarding specific station locations are provided in our enclosed Detailed Comments.

We are pleased with RTD's commitment to mitigate impacts to all wetlands regardless of jurisdiction. Please include detailed wetland mitigation plans in the Final EIS. Please also note that special maintenance and cleanup commitments are needed for stations with adjacent wetlands. Finally, station locations within or near wetlands present a concern due to increased flows from impervious surfaces (stormwater) resulting in erosion of receiving waters (i.e., downcutting of streams). Stormwater flows from the facilities should be detained to prevent degradation of these waters with invert/streambed stabilization in the near vicinity of the project. Stormwater detention is discussed further in the following section on water quality.

### Water Quality

The North Metro Corridor Project will likely have a net effect of reducing pollutant loading to the South Platte watershed from vehicular traffic since it will reduce the vehicle miles traveled in the watershed. However, specifics for the design and maintenance of Best Management Practices (BMPs) should be included in the Final EIS to address pollutant loading from parking lots on a more site-specific basis.

As identified in the Draft EIS, streams within the project area have been listed as impaired for pollutants including ammonia, cadmium, dissolved oxygen, *E. coli*, nitrate, and selenium. Please provide further explanation regarding how the results of the Driscoll modeling were used to confirm that pollutants associated with stormwater runoff from increased impervious surfaces will not cause or contribute to an impairment of local waters.

Additionally, for those stations where pre-BMP exceedances for copper have been predicted (124<sup>th</sup> Ave. and 162<sup>nd</sup> Ave), monitoring should be implemented to ensure that BMPs adequately reduce pollutant concentrations.



### Air Quality

EPA recommends additional discussion on potential air quality impacts of the proposed project be added to the Final EIS; we note that much of this information has already been prepared for the East Corridor and associated Commuter Rail Maintenance Facility (CRMF). Overall, the North Metro Corridor project and East Corridor project are very similar and also share the CRMF. The wealth of pertinent and relevant air quality information previously prepared for East Corridor should be included in the North Metro Corridor Final EIS. Many of our enclosed Detailed Comments reference specific language, tables, descriptions, and mitigation measures that are included in the East Corridor Final EIS that should be incorporated into the Final EIS for the proposed project. Specifically, EPA recommends additional discussion regarding ambient air quality data, Mobile Source Air Toxics (MSAT), and carbon monoxide (CO) hotspot modeling. Further incorporation of impacts identified for the CRMF as well as increased discussion of construction impacts and mitigation commitments are also needed.

### Superfund Sites

According to Figure 3.11-1, Hazardous Material Sites - Southern Section, it appears the rail line might run through both the Vasquez Blvd./I-70 Superfund Site and the ASARCO - Globe Site. If the North Metro Fast Tracks line goes through or otherwise impacts either of these sites, we recommend that any construction, demolition, or disturbance of the soils be coordinated with EPA's Superfund Program Office.

Thank you for the opportunity to comment on this Draft EIS. We hope that our comments will be of value to FTA in preparing the Final EIS. If you have any questions on the comments provided in this letter, please contact me at 303-312-6004, or you may contact Molly Brodin of my staff at 303-312-6577.

Sincerely,



Larry Svoboda

Director, NEPA Compliance and Review Program  
Office of Ecosystems Protection and Remediation

Enclosures: Detailed Comments  
EPA's Rating System Criteria



## **EPA'S DETAILED COMMENTS FOR THE NORTH METRO CORRIDOR DRAFT EIS**

### Water Quality

Copper and zinc were used as representative pollutants for the water quality modeling for North Metro Corridor, and the Driscoll model predicts no exceedances of national acute or chronic freshwater criteria after BMP implementation for either of these compounds. However, it is unclear how these results were used to determine if any exceedances will result for local contaminants of concern. Incremental increases in the discharge of pollutants associated with new impervious surfaces should be added to current concentrations in streams to determine if there are potential stream impacts resulting from pollutant runoff.

It is stated in the Draft EIS that "Permanent BMPs, such as extended detention basins, grass buffers, and grass swales for the stations will be constructed and maintained as required by the laws and regulations for the location." EPA recommends more thorough discussion of these measures, to clarify that site-specific BMPs will be installed which will effectively reduce pollutant loading. Specifically, for parking lots serving less than 1,000 cars, a design standard should be stated by which BMPs will be installed and maintained. For example, all parking lots serving less than 1,000 cars will detain/retain/infiltrate the 2-year, 24-hour flood event. For larger parking lots, which serve greater than 1,000 cars and have more specific requirements under the RTD Municipal Separate Storm Sewer System (MS4) permit, more details should be included in the Draft EIS to address which type of BMP will be installed and any other design details that reflect the requirements.

### Wetland Impacts

The location of the track end within the Big Dry Creek wetland complex presents a significant concern. Please clarify what portion of the impacts from the northern alignment is located within this complex. We note that there are likely to be additional indirect impacts to this wetland complex associated with transit-oriented development. EPA recommends considering mitigation of direct and indirect wetland impacts to the large, adjacent wetland complex at the Big Dry Creek terminus to include purchasing adjacent wetlands (if put under increased and imminent development pressure). Additionally, the 104<sup>th</sup> Ave. Station is likely to significantly impact the Riverdale Tributary and Grange Hall Creek Watershed Wetlands Complex, yet no alternative locations were provided for this station. Please clarify why this is the only feasible station location for this portion of the corridor.

### Air Quality

Pg. 3.7-1, Section 3.7.1.1 Introduction to Analysis, fifth paragraph discusses short-term impacts and air pollutant emissions. This discussion should include carbon monoxide (CO) which is also a product of internal combustion engines.

Pg. 3.7-2, Section 3.7.1.2 Affected Environment, first paragraph in this section, states that consideration of the NAAQS will be limited to only CO, ozone, and PM<sub>10</sub> because Denver has been previously classified as a nonattainment or maintenance area for these NAAQS. PM<sub>2.5</sub> should be addressed since it is a component of all types of internal combustion, including motor



vehicles and non-road equipment, and particularly from diesel exhaust, which would be associated with the on-road and non-road construction equipment used for this project.

Pg. 3.7-3, Section 3.7.1.2 Affected Environment, first full paragraph on this page, end of the last sentence states, "[The] attainment plan was submitted to USEPA for review by July 1, 2009." This sentence should now be updated to state "[The] attainment plan was submitted by the State to EPA for review on June 18, 2009."

Pg. 3.7-3, Section 3.7.1.2 Affected Environment, Table 3.7-1: This table should be expanded to present additional information for the public regarding monitored ambient air quality in the vicinity of this project. At a minimum, ambient data should be included from 2006, 2007, and 2008 as these data have been quality assured, certified by the State of Colorado, and are currently available. Using at least three years of data is necessary to show trends and to accurately portray ozone data as the NAAQS relies on an average of three years of data. Also, a discussion of the monitoring data would assist the public's understanding of the air quality within the vicinity of the project. In addition, EPA recommends data also be presented from the CAMP and Auraria monitoring stations as both are in the vicinity of the project (see monitor descriptions below as extracted from CDPHE's website.) For an example of a better presentation of these ambient air quality data, please refer to Table 3.8-2 of the FasTracks East Corridor Final EIS.

**CAMP (CAMP) Region: Denver**  
Monitoring Station, 2105 Broadway  
SAROAD: 0580002F01, AQS ID: 080310002  
Latitude: 39.751180, Longitude: -104.987600  
Reporting capabilities (hourly)  
SLAMS: CO, PM10, PM2.5, NAMS: NO2, SO2

**Auraria (S+A) Region: Denver**  
Monitoring Station, 1300 Blake St.  
SAROAD: 0580019F05, AQS ID: 080310019  
Latitude: 39.748160, Longitude: -105.002600  
Reporting capabilities (hourly)  
SLAMS: CO

Pg. 3.7-4, Section 3.7.1.2, Affected Environment, second full paragraph on this page asserts that, "Nationally, PM<sub>10</sub> levels have been decreasing over the past 30 years (CDPHE 2007): The overall levels of this pollutant in the Northern Front Range have been fairly constant since 1997 (CPDHE 2007)." EPA believes this paragraph needs revision as it is not supported when compared to EPA-approved SIP documents regarding projected PM<sub>10</sub> emissions. The Denver-metro area's second 10-year maintenance plan was approved by EPA on November 6, 2007 (see 72 FR 62571.) This revised maintenance plan contains emission inventories of primary PM<sub>10</sub> and its secondary emissions on page 4-8, "Table 4.2" for the years 2001, 2009, 2010, 2015, 2020, and 2022. The primary PM<sub>10</sub> emissions are projected to increase from 62.3 tons per day in 2001 to 107.5 tons per day in 2022.



Also, to assist the public in understanding the relationship between Vehicle Miles Travelled (VMT) and criteria pollutant emissions, EPA suggests including a table with relevant VMT information similar to Table 3.8-3 "Annual Regional Vehicle Miles Traveled No-Action Alternative versus the Preferred Alternative" that was included in the East Corridor Final EIS.

Pg. 3.7-5, Section 3.7.1.3, Impact Evaluation, Mobile Source Air Toxics (MSAT) section: Although this project involves EMU commuter rail trains, MSATs will be associated with emissions from both on-road and non-road vehicles and engines during the construction phase of the project. There will also be MSAT emissions from the construction and operation of the project's associated Commuter Rail Maintenance Facility (CRMF.) Additional discussion of MSAT emissions related to the project should be included; we provide some suggested references below.

EPA notes there is significant information available regarding MSATs and surrounding communities from the "Commuter Rail Maintenance Facility Supplemental Environmental Assessment (EA) to FasTracks Commuter Rail Corridors" (dated April 2009, [http://www.eastcorridor.com/CRMF\\_SupplementalEA.html](http://www.eastcorridor.com/CRMF_SupplementalEA.html)). For the purpose of full disclosure, the public should be made aware of this information and the Final EIS should reference and refer the reader to pertinent sections of the CRMF Supplemental EA. This section should also refer to the MSAT discussion in the "Commuter Rail Maintenance Facility Supplemental Environmental Assessment Environmental Resources Technical Memorandum, Supplement to FasTracks Commuter Rail Environmental Documents, Incorporated by Reference" (dated April 2009.) In addition, the Final EIS should also reference and refer the reader to the "FasTracks Corridor Commuter Rail Maintenance Facility Technical Memorandum" (dated as revised April 10, 2009) with regard to section 20.4 "Mobile Source Air Toxic (MSAT) Analysis." This particular section of the CRMF Technical Memorandum provides estimated MSAT emissions from the CRMF for 2005 (existing conditions) and the no-build / build alternatives for 2015 and 2030.

EPA notes that with regard to FHWA's "Interim Guidance Update on Mobile Source Air Toxic Analysis in USEPA Documents" (September 30, 2009) referenced on page 3.7-5, while there are positive elements of this interim guidance, RTD should be aware that EPA, nationally, continues to disagree with major pieces of the approach taken in this guidance, as well as much of the specific language used in the guidance.

Pg. 3.7-6, Section 3.7.1.3, Impact Evaluation, Intersection Carbon Monoxide Hot Spot: As discussed in this paragraph and the following sections of the Draft EIS related to carbon monoxide (CO) hotspot modeling, EPA was unable to find a reference to an appendix in the Draft EIS that contains the CO hotspot analyses detailed information. An appendix similar to "Appendix A" of the East Corridor Final EIS Air Quality Technical Report should be included with the Final EIS.

Pg. 3.7-7, Table 3.7-3 Annual Regional Emissions For The No Action Alternative: It is unclear how the "Regional" area is defined. For example, the year 2030 CO emissions are presented in Table 3.7-3 as 295,952.7 tons per year. This figure divided by 365 would give an average daily figure of approximately 810 tons per day of CO. However, the DRCOG FHWA-



approved 2009 Cycle 1 conformity determination emissions test (refer to page 31, "Table 6" of the DRCOG document) indicates an estimated 1286.1 tons per day of CO for 2030 for the Denver CO maintenance area. EPA recommends that the term "Regional" be defined for clarity as it may appear inconsistent when compared to other relevant emissions inventory documents such as the DRCOG referenced document. This comment also applies to Table 3.7-7 of the Draft EIS.

Pg. 3.7-15, Temporary Construction Impacts: We believe this section does not adequately address potential air quality impacts and mitigation from this project activity. EPA recommends that RTD refer to page 3.8-9 of the East Corridor Final EIS and include the same language (modified as appropriate for this project) in the Final EIS.

Pg. 3.7-17, Section 3.7.1.4, Mitigation, Table 3.7-14: The impacts and mitigation for the North Metro Corridor project should be expanded and be the same as presented in the East Corridor Final EIS, Table 3.8-6 "Air Quality Impacts and Mitigation Related to the Preferred Alternative."

#### Superfund Sites

The Vasquez Blvd. /I-70 Superfund Site Operable Unit #1 (OU1) encompasses the neighborhoods of Swansea, Elyria, Clayton, Cole, the southwest portion of Globeville, and the northern portion of Curtis Park. In addition, the Vasquez Blvd. /I-70 Superfund Site includes Operable Unit #2 (OU2, the former Omaha & Grant Smelter) and Operable Unit #3 (OU3, the former Argo Smelter). The statutory 5-year review of the completed cleanup action dated September 30, 2009, found that institutional controls should be implemented at OU1. Because access was not granted by some residential property owners, it is important to note that not all of the properties were cleaned up. EPA and the Colorado Department of Public Health and Environment (CDPHE) are currently working on ensuring that future residents at the properties left out of the cleanup are aware of the potential for unresolved soil contamination. At OU2 (the Denver Coliseum and surrounding businesses), EPA, the City and County of Denver, and CDPHE are investigating potential heavy metal contamination on surface/subsurface soils. A Record of Decision is planned for early FY2011. If the North Metro Fast Tracks line goes through OU1 and/or OU2, we recommend that any construction, demolition, or disturbance of the soils be coordinated with Ms. Kerri Fiedler of EPA's Superfund Program Office (Ms. Fiedler can be reached at 303-312-6493). It appears that the proposed rail line will not impact OU3.

The ASARCO- Globe Site extends east to the Platte River, west to I-25, south to the Burlington Northern Rail Road tracks (at approximately 43rd Avenue) and north to 60th Avenue. The ASARCO - Globe Site consisted of contaminated soil and groundwater. Residential cleanup is completed; however, some industrial properties are left to be cleaned up. There is an Environmental Covenant (effective date: 2005) for the Globe Plant Site (bounded by East 51st Avenue on the south, the Industrial Drainage Ditch on the west, East 56th Avenue on the north, and Washington Street on the east) which includes use restrictions on the property. However, according to Figure 3.11-1 of the Draft EIS, it appears the rail line will not run through this part of the ASARCO - Globe Site.

## GHG

EPA appreciates the information that was prepared for the Draft EIS regarding greenhouse gas emissions associated with the proposed project. In light of increasing national attention on the subject of climate change, we recommend reorganizing the greenhouse gas topics currently spread throughout Section 3.7.1, Air Quality, to make a third section of subchapter 3.7 devoted to greenhouse gases and climate change.

We note that EPA is still waiting on guidance from the Council on Environmental Quality (CEQ) on climate change analysis in NEPA documents. In the interim, however, EPA has generally looked for five basic aspects to be included in global climate change discussion in NEPA documents. We recommend that EISs for greenhouse gas-emitting projects subject to NEPA should:

- 1) Disclose projected cumulative greenhouse gas emissions (in annual CO<sub>2</sub> equivalents and over the lifetime of the project);
- 2) Translate the emissions into relevant equivalencies that are understandable to the public in relation to other greenhouse gas sources;
- 3) Describe the project's emissions in the context of total greenhouse gas emissions at regional, national and global scales;
- 4) Describe generally, the environmental impacts of climate change based on current scientific knowledge; and
- 5) Discuss means to mitigate project-related emissions as appropriate pursuant to CEQ regulations.

Pg. 3.7-6, Section 3.7.1.3, Impact Evaluation, Greenhouse Gases: As the EMU vehicles will need to consume electric power, the power source impacts should be included in the impact assessment. We also suggest that the EPA web-links below be used to calculate estimated greenhouse gas emissions associated with the electric power used by the EMUs (based on MWh and/or GWh).

<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

[http://www.epa.gov/cleanenergy/documents/egridzipseGRID2007V1\\_1\\_year05\\_GHGOutputRates.pdf](http://www.epa.gov/cleanenergy/documents/egridzipseGRID2007V1_1_year05_GHGOutputRates.pdf)

Please refer to "Table 3.8-5" that was provided in the East Corridor Final EIS. Based on MWh or GWh electricity usage by the EMUs and considering the "RMPA" ("WECC Rockies") data, CO<sub>2</sub>, methane, and nitrous oxide emissions estimates could be prepared. This is an issue EPA raised in scoping for this and other FasTracks projects, and we believe it is important to include this information in either the impact evaluation or the energy section of the Final EIS. Additionally, please include units for the conversion factors provided on page 3.7-6, to make the greenhouse gas emission calculations used more apparent to the reader.



## **U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements**

### **Definitions and Follow-Up Action\***

#### **Environmental Impact of the Action**

**LO - - Lack of Objections:** The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC - - Environmental Concerns:** The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO - - Environmental Objections:** The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU - - Environmentally Unsatisfactory:** The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

#### **Adequacy of the Impact Statement**

**Category 1 - - Adequate:** EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 - - Insufficient Information:** The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new, reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 - - Inadequate:** EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment February, 1987.

